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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,809	11/24/2003	Jin Young Kim	6661-000021/US	3473
30/593 7590 04/15/2010 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
CHACKO DAVIS, DABORAH				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
04/15/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/718,809

**Applicant(s)**

KIM ET AL.

**Examiner**

DABORAH CHACKO DAVIS

**Art Unit**

1795

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2 and 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI.08)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, and 11, are rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Patent No. 6,620,577 (Lynch et al., hereinafter referred to as Lynch).

Lynch, in col 15, lines 1-10, and lines 66-67, in col 16, lines 1-4, lines 24-28, and lines 33-48, in col 17, lines 35-54, in col 37, lines 1-67, in col 38, lines 1-9, and lines 27-44, in col 39, lines 20-42, in col 40, lines 32-60, discloses a photothermographic emulsion (composition, organometallic composition) that can be light sensitive (i.e., photosensitive) such as silver salts of organic acids or silver complexes that include Ag; and adding to the composition chemical sensitizers such as a gold containing compound that has the formula of AuLY (structure IX), wherein the ligand L can include an arene, and Y is the anion such as sulfate, and further adding to the silver containing composition (photothermographic emulsion) at least another chemical sensitizer that has the structure ML'X<sup>2</sup>, wherein M is a metal such as Pd, and L' is a neutral ligand such as arsine compound (E(R<sub>a</sub>)(R<sub>b</sub>)(R<sub>c</sub>); wherein E=As, R<sub>a</sub>, R<sub>b</sub>, R<sub>c</sub> are alkyl or aryl groups). Lynch, in col 52, lines 57-67, in col 53, lines 1-67, and in col 54, lines 1-31,

discloses that the photothermographic material (emulsion) is subjected to exposure to form a pattern by performing an imaging exposure followed by a thermal development at moderately elevated temperatures to form the desired visible image (pattern that will include the metal alloy) (claims 1-2, and 11).

### ***Response to Arguments***

3. Applicant's arguments filed December 15, 2009, have been fully considered but they are not persuasive. The 35 U.S.C. 102(e) rejection of claims 1-2, and 11, mailed September 15, 2009, has been maintained.

A) Applicants argue that Lynch does not disclose the organometallic compound of claims 1, and 11 and that Lynch does not disclose the claimed neutral ligand with photosensitivity.

Applicant's claims 1, and 11, recite that the organometallic composition comprises an organometallic compound (I) of formula I, wherein Formula I is  $Ag_mL_nX_p$ , and that m can be 1 to 10, n can be 0 to 40, and p can be 0 to 40, i.e., for  $m=1$ ,  $n=0$ , and  $p=0$ , the formula I of the organometallic compound is Ag. Lynch teaches a silver complex that includes silver. Also for  $n=0$ , as claimed by the applicant, there is no ligand present in the claimed composition, photosensitive or not, in the organometallic composition. Lynch teaches the photothermographic material composition that is an emulsion of silver metal complex and gold compound (organic gold complex), and palladium metal complex, and is disclosed above in paragraph no. 2, above and is essentially the same as that recited in claims 1, and 11.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daborah Chacko-Davis whose telephone number is (571) 272-1380. The examiner can normally be reached on M-F 9:30 - 6:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F Huff can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

Art Unit: 1795

more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Daborah Chacko-Davis/  
Primary Examiner, Art Unit 1795

April 10, 2010.